ABSTRACT

Channel Equalisation

A method of reducing multiple access interference in a CDMA radio system uses a plurality of rake fingers to pre-process received signals but without demodulation or de-spreading. The outputs of the rake fingers are combined, normalised and then processed by an adaptive equaliser to recover orthogonality lost in transmission. The equaliser output is then subject to de-spreading and descrambling to recover the desired user signals. The equaliser is preferably adaptive order, the length being adapted in dependence upon the instantaneous signal to noise ratio.

Figure 3